

CHAPTER V

CONCLUSION

The extracted Thai RBL was clarified to perform a specific high activity as a catalyst in polyesterification comparable to that of the reported lipases. Thai RBL catalyst was found to initiate the polyesterification not only in the case of the monomer-monomer reaction but also the monomer-polymer reaction. The reaction temperature and time were the factors to effect the degree of polymerization. Although physisorption and chemisorption of Thai RBL onto fumed silica could be achieved at the certain level of immobilization, the activity was highly maintained in the case of physisorption. By using purified enzyme immobilized onto fumed silica, the activity was proven to be increased significantly.